

## Abstract

## An Electro-modulating Device

5 This relates to an electro-modulating device (10) for  
modulating light from a light source, as part of an opto-  
electronic communication network. The electro-modulating  
device (10) has a modulating medium (16) for modulating  
light passing therethrough by varying an electric field  
10 applied across the modulating medium (16), an optical  
input-output surface (21), a light reflector (28), and  
electrodes (15,17) for applying the varying electric field  
across the modulating medium (16). The input-output  
surface (21), the medium (16) and the reflector (28) are  
15 arranged so that light enters the medium (16) through the  
input-output surface (21), travels through the medium (16)  
towards the reflector (28), is reflected by the reflector  
(28) to travel back through the medium (16) towards the  
input-output surface (21), and exits the medium (16)  
20 through the input-output surface (21). The electric field  
is transverse to light traversing the medium (16) between  
the input-out surface and the reflector (28), to make it  
easier to couple an optic fibre to the input-output  
surface (21) of the modulating medium (16).

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Figure 1